Salifort Motors

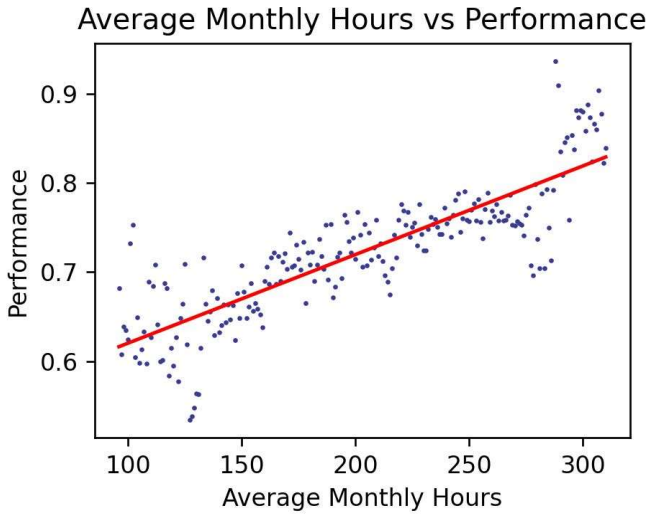
Employee Departure Predictor

Introduction

Salifort Motors' leadership team has noticed an increase in employee turnover recently, prompting them to seek improvements in retention. By using data from an HR survey, the objective of this project is to develop a predictive model identifying employees that are likely to leave. This report will highlight findings and key factors driving turnover, enabling targeted interventions to enhance retention efforts in the future.

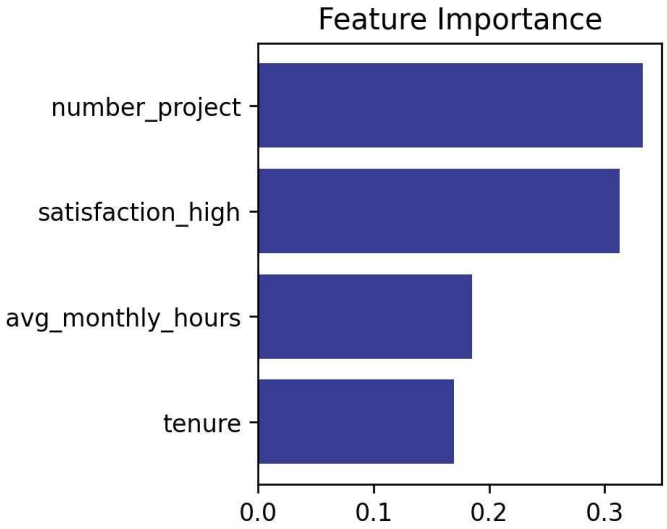
Findings

The analysis reveals several key findings: HR has the highest attrition, while management has the lowest, likely due to the respective lowest and highest proportions of high-salary employees. Attrition increases after two projects, indicating a possible excessive workload. Additionally, employees involved in at least one work accident show lower attrition, suggesting adequate compensation and support from the company.



Model

The final model prioritizes recall, given the focus on reducing false negatives and minimizing employee departures. It achieves a score of 91%. The most important features below likely mean that burnout from projects and higher average hours worked leads to higher attrition, employees who are highly satisfied depart less frequently, and employees who have worked longer tend to stay with the company.



Next Steps

Next steps involve surveying employees' satisfaction and their willingness to continue after completing two projects. It is also recommended to set a cap on work hours, given that performance seems to plateau between 170 and 260 hours per month. Additionally, gathering longitudinal data on employee departure, as well as performance across their tenure, will provide further insights.